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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/825,172	04/16/2004	Terrence Martineau	ALC 3130	8264

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EXAMINER

TAN, ALVIN H

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PAPER

**Please find below and/or attached an Office communication concerning this application or proceeding.**

The time period for reply, if any, is set in the attached communication.

<b>Office Action Summary</b>	<b>Application No.</b> 10/825,172	<b>Applicant(s)</b> MARTINEAU ET AL.	
	<b>Examiner</b> Alvin H. Tan	<b>Art Unit</b> 2173	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

**Period for Reply**

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

**Status**

- 1)  Responsive to communication(s) filed on 16 April 2004.
- 2a)  This action is **FINAL**.
- 2b)  This action is non-final.
- 3)  Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

**Disposition of Claims**

- 4)  Claim(s) 1-20 is/are pending in the application.
  - 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5)  Claim(s) \_\_\_\_\_ is/are allowed.
- 6)  Claim(s) 1-20 is/are rejected.
- 7)  Claim(s) \_\_\_\_\_ is/are objected to.
- 8)  Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

**Application Papers**

- 9)  The specification is objected to by the Examiner.
- 10)  The drawing(s) filed on 16 April 2004 is/are: a)  accepted or b)  objected to by the Examiner.
  - Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
  - Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11)  The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

**Priority under 35 U.S.C. § 119**

- 12)  Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
  - a)  All    b)  Some \*    c)  None of:
    - 1.  Certified copies of the priority documents have been received.
    - 2.  Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
    - 3.  Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

**Attachment(s)**

- 1)  Notice of References Cited (PTO-892)
- 2)  Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3)  Information Disclosure Statement(s) (PTO/SB/08)  
Paper No(s)/Mail Date \_\_\_\_\_
- 4)  Interview Summary (PTO-413)  
Paper No(s)/Mail Date. \_\_\_\_\_
- 5)  Notice of Informal Patent Application
- 6)  Other: \_\_\_\_\_

## DETAILED ACTION

### *Remarks*

1. Claims 1-20 have been examined and rejected. This is the first Office action on the merits.

### *Drawings*

2. Figure 1 should be designated by a legend such as --Prior Art-- because only that which is old is illustrated. See MPEP § 608.02(g).
3. Corrected drawings in compliance with 37 CFR 1.121(d) are required in reply to the Office action to avoid abandonment of the application. The replacement sheet(s) should be labeled "Replacement Sheet" in the page header (as per 37 CFR 1.84(c)) so as not to obstruct any portion of the drawing figures. If the changes are not accepted by the examiner, the applicant will be notified and informed of any required corrective action in the next Office action. The objection to the drawings will not be held in abeyance.

### *Claim Rejections - 35 USC § 112*

4. The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

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5. Claims 5 and 6-12 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

- a. Claim 5 recites the limitation "said interactive group identification widget" in *[lines 1-2]* of the claim. It is unclear which of the interactive group identification widgets mentioned in *[line 2]* of claim 3 is being referred to.
- b. Claim 6 recites the limitation "the type" in *[line 1]* of the claim. The addition of the word "type" extends the scope of the expression so as to render it indefinite. See MPEP 2173.05(b).
- c. Claim 7 recites the limitation "the association" in *[line 2]* of the claim. There is insufficient antecedent basis for this limitation in the claim.

### ***Claim Rejections - 35 USC § 101***

6. 35 U.S.C. 101 reads as follows:

Whoever invents or discovers any new and useful process, machine, manufacture, or composition of matter, or any new and useful improvement thereof, may obtain a patent therefor, subject to the conditions and requirements of this title.

7. Claims 6-12 and 16-20 are rejected under 35 U.S.C. 101 because the claimed invention is directed to non-statutory subject matter.

- a. Regarding claim 6, computer programs claimed as computer listings per se, i.e., the descriptions or expressions of the programs, are not physical "things." They are neither computer components nor statutory processes, as they are not "acts" being performed. Such claimed computer programs

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do not define any structural and functional interrelationships between the computer program and other claimed elements of a computer which permit the computer program's functionality to be realized. Therefore, claim 6 is non-statutory.

- b. Regarding claim 16, data structures not claimed as embodied in computer-readable media are descriptive material per se and are not statutory because they are not capable of causing functional change in the computer. See, e.g., *Warmerdam*, 33 F.3d at 1361, 31 USPQ2d at 1760 (claim to a data structure per se held nonstatutory). Such claimed data structures do not define any structural and functional interrelationships between the data structure and other claimed aspects of the invention which permit the data structure's functionality to be realized. Further, the claim merely recites nonfunctional descriptive material and is not statutory since no requisite functionality is present to satisfy the practical application requirement.

***Claim Rejections - 35 USC § 103***

8. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

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9. Claims 1-20 are rejected under 35 U.S.C. 103(a) as being unpatentable over Jain et al (U.S. Patent No. 6,225,999 B1) and Arquie et al (U.S. Patent No. 6,836,275 B1).

**Claims 1-5 (Method)****Claims 6-12 (Modified GUI)****Claims 16-20 (Network Map)**

9-1. Regarding claims 1, 6, and 16, Jain teaches the claim comprising collecting data for all objects to be displayed on said map in response to a request transmitted over a GUI, by disclosing a graphical user interface which permits a network manager to select a limited number of network components for display in a topological map, along with pertinent information relating thereto, while removing the display of undesirable or unnecessary data [*column 2, lines 42-47*]. Information regarding the network components is first gathered as described in [*column 4, line 17 to column 5, line 3*].

Jain teaches bundling all connections between a network device and a group of network devices outside said map into an outside link, grouping all outside links for said network device into a multiple link connector (MLC) object and displaying said map, by disclosing that all components which are not illustrated in a created map are identified by an indicator with a star as shown in [*figure 4; column 6, lines 29-44*].

As per claim 6, Jain teaches maintaining a connections list  $L(n)$  for each said outside link, by disclosing that information regarding the unillustrated components are stored in a repository [*column 6, lines 29-44*].

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Jain does not expressly teach associating said MLC object with an interactive connector icon and displaying said map showing said interactive connector icon attached to said network device. Arquie teaches a method for displaying multiple connections between nodes in a network topology display in a computer user interface [column 1, lines 22-25]. Symbols are used to indicate multiple connections [column 2, lines 7-20]. This provides a simplified way to clearly and effectively identify multiple connections to a user. Since Jain teaches displaying network components in a topological map and indicating the number of connections to components outside the map, it would have been obvious to one of ordinary skill in the art at the time the invention was made to include a symbol representing the number of connections, as taught by Arquie. This would provide a simplified way to clearly and effectively identify multiple connections to a user.

9-2. Regarding claims 2, 7, and 17, Jain and Arquie teach the claim further comprising selecting said interactive connector icon for displaying a pop-up window showing a multiple link connector list where each outside link object is associated with a respective group object, by disclosing a pop-up menu that allows users to obtain information about the peers of the node [Jain, column 7, line 62 to column 8, line 16; figure 6] and displaying details of the multiple connection upon user selection of the symbol [Arquie, column 2, lines 21-27]. Each outside link is associated with the node they are connected with on the map.

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9-3. Regarding claims 3 and 18, Jain and Arquie teach the claim wherein said multiple link connector list displays in each row an interactive outside link widget associated with a respective interactive group identification widget, by disclosing the pop-up menu containing commands relating to the peers of the node. The two commands "Show Adj. Peers" and "Peer Group View" are both group identification widgets associated with the commands on the menu [*Jain, figure 6*].

9-4. Regarding claims 4 and 19, Jain and Arquie teach the claim further comprising selecting said interactive outside link widget on said multiple link connector list to display a connections list  $L(n)$  identifying all connections bundled within said outside link object, by disclosing the commands "Peer Information" and "Peer Statistics" on the menu [*Jain, figure 6*].

9-5. Regarding claims 5 and 20, Jain and Arquie teach the claim further comprising selecting said interactive group identification widget on said multiple link connector list to display a sub-map of said network showing all network devices in said group, by disclosing the commands "Show Adj. Peers" and "Peer Group View" on the menu [*Jain, figure 6; column 8, lines 3-16*].

9-6. Regarding claim 8, Jain and Arquie teach the claim wherein each outside link is displayed using an interactive outside link widget, by disclosing symbols representing



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multiple connections [*Arquie, column 2, lines 7-20*] which may display details of the multiple connection upon user selection of the symbol [*Arquie, column 2, lines 21-27*].

9-7. Regarding claim 9, Jain and Arquie teach the claim wherein each group of outside network devices is displayed using an interactive group identification widget, by disclosing commands on a pop-up menu relating to the peers of the node. The command "Show Adj. Peers" displays all components which are directly connected to the selected node [*column 8, lines 3-16*].

9-8. Regarding claim 10, Jain and Arquie teach the claim wherein said list organizer displays said MLC list in response to selection of said interactive outside link widget, by disclosing a pop-up menu that allows users to obtain information about the peers of the node [*Jain, column 7, line 62 to column 8, line 16; figure 6*].

9-9. Regarding claim 11, Jain and Arquie teach the claim wherein said list organizer displays a sub-map of said group in response to selection of said interactive group identification widget, by disclosing the commands "Show Adj. Peers" and "Peer Group View" on the menu [*Jain, figure 6; column 8, lines 3-16*].

9-10. Regarding claim 12, Jain and Arquie teach the claim wherein said interactive multiple link connector icon is not generated for a single connection, by disclosing that symbols are only used for multiple connections [*Arquie, column 2, lines 7-20*].

**Claims 13-15**

9-11. Regarding claim 13, Jain teaches the claim comprising obtaining a multiple link connector list and displaying an interactive outside link widget associated with an interactive group identification widget for each group of outside network devices connected to said network device, by disclosing a graphical user interface which permits a network manager to select a limited number of network components for display in a topological map, along with pertinent information relating thereto, while removing the display of undesirable or unnecessary data [column 2, lines 42-47]. A pop-up menu allows users to obtain information about peers of a selected node [Jain, column 7, line 62 to column 8, line 16; figure 6]. The pop-up menu contains commands relating to the peers of the node. The two commands "Show Adj. Peers" and "Peer Group View" are both group identification widgets associated with the commands on the menu [Jain, figure 6].

Jain does not expressly teach whenever a network device is connected to more than one outside network device of a group of outside network devices external to a map, displaying an outside link connecting said network device with said group using an interactive multiple link connector icon and selecting said multiple link icon on said map to obtain the multiple link connector list. Arquie teaches a method for displaying multiple connections between nodes in a network topology display in a computer user interface [column 1, lines 22-25]. Symbols are used to indicate multiple connections [column 2, lines 7-20]. This provides a simplified way to clearly and effectively identify multiple

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connections to a user. Since Jain teaches displaying network components in a topological map and indicating the number of connections to components outside the map, it would have been obvious to one of ordinary skill in the art at the time the invention was made to include a symbol representing the number of connections, as taught by Arquie. This would provide a simplified way to clearly and effectively identify multiple connections to a user. Details of the multiple connection are displayed upon user selection of the symbol [*Arquie, column 2, lines 21-27*]. Each outside link is associated with the node they are connected with on the map.

9-12. Regarding claim 14, Jain and Arquie teach the claim further comprising selecting said interactive outside link widget for said outside link to obtain a list L(n) with all connections between said network device and said group, by disclosing the commands "Peer Information" and "Peer Statistics" on the menu [*Jain, figure 6*].

9-13. Regarding claim 15, Jain and Arquie teach the claim further comprising selecting said interactive group identification widget on said multiple link connector list to display a sub-map of all network devices in said group, by disclosing the commands "Show Adj. Peers" and "Peer Group View" on the menu [*Jain, figure 6; column 8, lines 3-16*].

### **Conclusion**

10. The prior art made of record on attached form PTO-892 and not relied upon is considered pertinent to applicant's disclosure. Applicant is required under 37 C.F.R §

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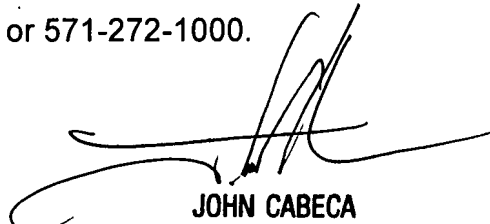
111(c) to consider these references fully when responding to this action. The documents cited therein teach similar systems for a multiple link connector list.

11. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Alvin H. Tan whose telephone number is 571-272-8595. The examiner can normally be reached on Mon-Fri 10:00-6:30.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, John Cabeca can be reached on 571-272-4048. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

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